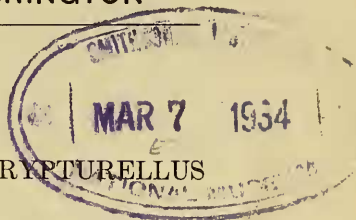


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



THE RACES OF THE TINAMOU *CRYPTURELLUS*
CINNAMOMEUS.

BY H. B. CONOVER.

Having always been greatly interested in the tinamou, recently on receipt of a series of *Crypturellus cinnamomeus* from Honduras, I undertook a study of all the races of this species. It was surprising to discover that there was little material in this country from north of Honduras and Salvador; therefore, not much could be done with the races found in Mexico, except for *C. c. goldmani* from Yucatan. From south of Guatemala, specimens were much more numerous and the races could be worked out more satisfactorily.

Two forms from northern South America, *Crypturus idoneus* (Todd) and *Crypturellus cinnamomeus spencei* (Brabourne and Chubb) have been called races of *cinnamomeus*. While they may eventually be proven to be such, the evidence is not yet conclusive; and since the gap in distribution is considerable, I have omitted them for the present.

For the loan of material I am indebted to Mr. James L. Peters of the Museum of Comparative Zoology; to Mr. J. T. Zimmer of the American Museum of Natural History; to Dr. Herbert Friedmann of the U. S. National Museum; to Mr. A. J. Van Rossem of the California Institute of Technology, and to Mr. Rudyerd Boulton of Field Museum.

Crypturellus cinnamomeus cinnamomeus (Lesson).

Tinamus (Nothura) cinnamomeus Lesson, Rev. Zool. 1842, p. 210 (La Union, Central America = Salvador).

Specimens examined.—Salvador: 7 ♂ 3 ♀ from Lake Olomega, Mt. Cocaguatique, Volcan San Miguel, Rio San Miguel, Dept. San Miguel; Olomega, Volcan Conchagua, Dept. La Union; and Colima, Dept. Cuscatlan. Mexico: 1 ♀ Santa Efigenia, Tehuantepec.

This seems to be the smallest of the races, the wings of Salvador males averaging 156.5 and females 160.5 mm. The single female from Tehuantepec, however, has a wing of 174 mm. In coloration this form is very reddish on the breast and dark brownish on the back.

Peters (Birds of the World, Vol. 1) gives the range of this race as "southern Vera Cruz and Oaxaca south on Pacific slope to Nicaragua." He evidently considers *C. c. sallaei* from Cordoba, Vera Cruz, and *C. c. dellatritii* from Nicaragua as synonyms. I am inclined to doubt this and would state the range of the typical race as the Pacific lowlands from the Gulf of Fonseca to the Isthmus of Tehuantepec.

Crypturellus cinnamomeus mexicanus (Salvadori).

Crypturus mexicanus Salvadori, Cat. Birds Brit. Mus. 27, 1895, p. 516, (in key) p. 545 (Monte Verde, Tamaulipas, Mexico).

No specimens of this race seem to be available in the United States, so no comparison could be made.

Salvadori in comparing it to *C. cinnamomeus* says it is less rufous on the occiput and nape, and the female is not barred with black on the lower foreneck and sides of the breast. The range is given as northeastern Mexico.

Crypturellus cinnamomeus occidentalis (Salvadori).

Crypturus occidentalis Salvadori, Cat. Birds Brit. Mus. 27, 1895, p. 516, (in key) p. 546 (San Blas, Nayarit, Mexico).

No specimens have been available.

According to Salvadori, in the males the occiput and sides of the head are not rufescent but olive brown, and the lower foreneck and breast are grayish, with no reddish tinge. The only range given is Tepic.

Crypturellus cinnamomeus sallaei (Bonaparte).

Nothocercus sallaei Bonaparte, Compt. Rend., 42, p. 881, n. 333, p. 954, n. 9. (1856) (Cordoba, Vera Cruz, Mexico).

One specimen has been examined from near the type locality. This is a bird taken at Omealea (or Omgalea) near Cordova. It is an old specimen which seems to have been mounted at some time. The label calls it a female, but as the forehead and the fore part of the crown are unbarred black, I take it really to be a male. The wing measures 169 mm. In coloration it is much lighter (brownier, less blackish) on the upper parts than either males or females from Salvador. Basing an opinion on one specimen of course is hazardous, but considering the difference in climate between the north and south sides of the Isthmus of Tehuantepec, it seems that when more material is available, the name *sallaei* may be reinstated.

Crypturellus cinnamomeus inornatus (Nelson).

Crypturus inornatus Nelson, Auk, 17, 1900, p. 253 (Metlatoyuca, Puebla, Mexico).

Specimens examined.—Mexico: 1 ♀ Metlatoyuca, Puebla; 1 ♂, 2 ♀ Orizaba, 1 ♂, 1 ♀ Jalapa, 1 ♂ Buena Vista, 1 ♂ Pasa Nueva, 1 ♂ Mirador (near Vera Cruz), Vera Cruz.

There is great doubt in my mind as to what race or races the specimens listed above represent. Certainly the female from Metlatoyuca is a very much browner bird on the upper parts than all the rest. It may be that the others really represent *sallaei*, or even *mexicanus*, or both. The individual variation is so great, however, that it seems impossible to classify them without fresh material from near the type localities. It may be that *inornatus* will prove to be simply a synonym of *sallaei*.

Crypturellus cinnamomeus goldmani (Nelson).

Crypturus sallaei goldmani Nelson, Proc. Biol. Soc. Wash., 14, 1901, p. 169 (Chichen Itza, Yucatan).

Specimens examined.—Mexico: 2 ♀ Chichen Itza, 2 ♂ Temax, 3 ♀, 3 ♂ Yucatan. Guatemala: 2 ♀ Uaxactun, Peten.

The females of *goldmani* are distinguished from all other races by the sharp contrast between the dark reddish chest and upper breast and the very light buffy white lower breast and belly. Compared to typical *cinnamomeus* the upper parts and the chest in both sexes are lighter, less reddish. Wings of females from Yucatan average 161.8; males 164.4 mm.

Range.—Throughout the Yucatan Peninsula and northern Guatemala.

Crypturellus cinnamomeus vicinior, subsp. nov.

Type from La Flor, near Archaga (about half way between Tegucigalpa and Comayagua), Dept. Tegucigalpa, Honduras. No. 10368, adult male in the Conover Collection, Field Museum of Natural History, Chicago. Collected June 14, 1932, by C. F. Underwood.

Characters.—Differs from *C. c. cinnamomeus* on the upper parts by being lighter, more brownish, less reddish. This is especially noticeable on the nape, back of the neck, and mantle. The light barring on the tail, rump, and upper wing coverts is whiter and broader. On the under side the chest, upper breast, and sides are lighter, more ochraceous, much less reddish, while the lower foreneck is lighter gray. It is also considerably larger, females averaging 171.2, males 167 mm.

Differs from *C. c. dellatriti* on the under side by being lighter, more ochraceous, less reddish (*dellatriti* in the reddish color of its breast is about midway between *vicinior* and *cinnamomeus*). On the upper side the females are much lighter brownish, less reddish, but in the males this difference is less pronounced. In both sexes, however, the barring of the upper wing coverts is heavier and whiter, therefore much more pronounced.

Differs from *C. c. praeepes* by having the upper parts lighter, more grayish, less brownish, and by having the barring of the upper wing coverts whiter and more pronounced. On the under side it is slightly lighter on the chest, and the gray of the foreneck and upper chest is lighter and much less extensive. The female of *vicinior* differs radically from the female of *praeepes*

in having only a slight, inconspicuous barring on the foreneck and chest. In *praepes* there is heavy barring in all eight examples before me.

Differs from *C. c. goldmani* by being lighter, less reddish on the chest and upper breast, and in the females by being darker, more ochraceous on the lower breast and belly. On the upper parts the females are much less reddish on the nape and back of the neck, while the males are slightly lighter on the back. It is also somewhat larger than *goldmani*.

Description.—Forehead and crown black. Nape and back of the neck rufescent, indistinctly barred with black. Mantle, upper back and scapulars grayish brown with an olive tinge and very finely vermiculated with blackish. Lower back and upper tail coverts grayish brown barred with black, the bars becoming wider on the tail coverts. Tail black, barred with buff, and tipped with buffy white. Primaries and secondaries dark brown, the latter barred on the outer web with buffy white, these bars becoming obsolete on the outermost ones. Primary and secondary coverts dark brown, barred widely with buffy white. Outer wing coverts dark brown, inner ones grayish with light buff tips. Sides of the head and neck ochraceous, the latter with a rufous tinge. Throat white, foreneck light gray, chest and breast ochraceous buff, with a grayish tinge on the upper chest. Abdomen buff. Flanks dark brown barred with buff. Under tail coverts dark brown at base, the terminal third ochraceous buff, sparsely splotched with dark brown, and almost white at the tip. Wing 170, tarsus 46, culmen 25, middle toe (with claw) 33 mm.

Specimens examined.—Honduras: 17 ♂, 3 ♀ Hatillo, 6 ♂, 2 ♀ La Flor, 1 ♂ Monte Redondo, 1 ♂ Cerro Cantoral, Dept. Tegucigalpa. Mexico: 1 ♂, 1 ♀ Canjob, Chiapas.

The females of this new race differ markedly from the females of the neighboring races, *cinnamomeus*, *goldmani*, *dellatirii*, and *praepes*. The males, although differing markedly from males of *cinnamomeus*, closely approach specimens of the same sex in the other three, especially *goldmani*.

The two specimens from Chiapas agree perfectly with the series from Honduras.

Range.—Western highlands of Honduras, and probably those of Guatemala and Chiapas.

Crypturellus cinnamomeus dellatirii, Bonaparte.

Tinamus dellatirii Bonaparte, Compt. Rend., 38, p. 663, 1854 (Nicaragua).

Specimens examined.—Nicaragua: 10 ♂, 5 ♀ from Volcan de Chinandega, San Geronimo, Volcan Viego, Tepitapa, Leon, and Muy Muy.

The females of this race are only slightly lighter on the underparts than those of typical *cinnamomeus*, and on the upper parts there is no difference. In *cinnamomeus*, however, the females are distinctly barred on the lower neck and upper chest, while in *dellatirii* barring is absent or very indistinct. In the males, the Nicaraguan birds are much lighter, more brownish on the upper parts and less reddish on the chest and upper breast. In size this form is much larger, equalling *praepes* in this respect. The average of the wings of females is 168.8 and of males 165.9 mm.

Range.—Probably confined to northwestern Nicaragua.

Crypturellus cinnamomeus praepes (Bangs & Peters).

Crypturornis cinnamomeus praepes, Bangs & Peters, Bull. Mus. Comp. Zool., 67, No. 15, 1927, p. 472 (Bolson, Costa Rica).

Specimens examined.—Costa Rica: 4 ♂, 8 ♀ from Las Canas, Bebedero, Huma, Paquera and Ballina.

This seems to be the largest of the races. The eight females have wings averaging 167.5 mm. and the four males average 171.75 mm. In coloration the females are paler and browner on the upper parts than typical *cinnamomeus*, and on the under side are much less reddish on the chest and lighter, more buffy on the lower breast and belly. They are also much more heavily barred on the lower neck and chest than in any other race. The males are lighter brown, less reddish on the upper parts, and on the under sides are paler, more buffy.

Range.—Northwestern Costa Rica.